

094342.0028
Examiner Gregory E. Webb
Art Unit 1751

CLAIMS

Amendments to the Claims:

This listing of claims will **replace all prior** versions, and listings, of claims in the application:

1. (Currently Amended) A method of cleaning comprising the steps of: selecting a substantially non-reactive, non-aqueous, non-oleophilic, apolar working fluid; selecting at least one washing adjuvant; bringing said working fluid and adjuvant in contact with the fabric in an automatic ~~consumer-operated laundering apparatus~~ washing machine; and applying mechanical energy to provide relative movement within said fabric in the automatic ~~consumer-operated laundering apparatus~~ washing machine.
2. (Original) The method of claim 1 wherein said non-reactive, non-aqueous, non-oleophilic, apolar working fluid under standard conditions is further characterized by: a KB value less than approximately 30; a surface tension less than approximately 35 dynes/cm²; and a solubility in water less than 10%.
3. (Currently Amended) The method of claim 1 in which substantially all materials that comprise the automatic ~~consumer-operated laundering apparatus~~ washing machine in contact with said working fluid are selected from a group of non-spark generating materials
4. (Currently Amended) The method of claim 1 in which the substantially all of the materials that comprise the automatic ~~consumer-operated laundering apparatus~~ washing machine contacted by said working fluid are conductive polymers.

094342.0028
Examiner Gregory E. Webb
Art Unit 1751

5. (Currently Amended) The method of claim 1 wherein said mechanical energy occurs in a chamber which confines said working fluid and fabric in the automatic ~~consumer-operated laundering apparatus~~ washing machine.
6. (Original) The method of claim 5 including the step of introducing a water-in-working fluid emulsion to the chamber which confines the fabric and said working fluid.
7. (Previously Amended) The method of claim 6 wherein at least one dispensing chamber is provided and the at least one washing adjuvant is added to said chamber.
8. (Previously Amended) The method of claim 7 including a further step of introducing a water-in-working fluid emulsion into the adjuvant-dispensing chamber.
9. (Previously Amended) The method of claim 1 including a further step of introducing a water-in-working fluid emulsion to the fabric prior to bringing the working fluid in contact with the fabric.
10. (Previously Amended) The method of claim 1 including a further step of detecting the level of said working fluid in contact with the fabric.

094342.0028
Examiner Gregory E. Webb
Art Unit 1751

11. (Previously Amended) The method of claim 1 including a further step of sensing the initial moisture content of the fabric.
12. (Previously Amended) The method of claim 11 wherein the sensing step is carried out by sensing the humidity of the fabric to be cleaned.
13. (Previously Amended) The method of claim 11 wherein the sensing step is carried out by sensing the conductivity of the fabric.
14. (Previously Amended) The method of claim 11 wherein the sensing step is carried out by sensing the humidity of the air.
15. (Previously Amended) The method of claim 11 wherein the sensing step is carried out inside the chamber.
16. (Previously Amended) The method of claim 1 wherein the temperature inside the chamber is sensed and adjusted to ensure that the temperature does not exceed 30 °F below the flash point of said working fluid unless the concentration of said working fluid does not exceed its lower flammability limit.
17. (Previously Amended) The method of claim 1 wherein the at least one washing adjuvant is selected from a group consisting of: builders, surfactants, enzymes, bleach activators, bleach

094342.0028
Examiner Gregory E. Webb
Art Unit 1751

catalysts, bleach boosters, bleaches, alkalinity sources, antibacterial agents, colorants, perfumes, pro-perfumes, finishing aids, lime soap dispersants, composition malodor control agents, odor neutralizers, polymeric dye transfer inhibiting agents, crystal growth inhibitors, photobleaches, heavy metal ion sequestrants, anti-tarnishing agents, anti-microbial agents, anti-oxidants, linkers, anti-redeposition agents, electrolytes, pH modifiers, thickeners, abrasives, divalent or trivalent ions, metal ion salts, enzyme stabilizers, corrosion inhibitors, diamines or polyamines or alkoxylates, suds stabilizing polymers, solvents, process aids, fabric softening agents, optical brighteners, hydrotropes, water, suds or foam suppressors, suds or foam boosters, fabric softeners, antistatic agents, dye fixatives, dye abrasion inhibitors, anti-croaking agents, wrinkle reduction agents, wrinkle resistance agents, soil release polymers, soil repellency agents, sunscreen agents, anti-fade agents and mixtures thereof.

18. (Original) The method of claim 17 wherein a preferred surfactant for the system will have a hydrophilic-lipophilic balance from approximately 3 to 14.

19. (Currently Amended) A method of cleaning comprising the steps of: selecting a substantially non-reactive, non-aqueous, non-oleophilic, apolar working fluid; selecting at least one washing adjuvant; bringing said working fluid and adjuvant in contact with the fabric in an automatic ~~consumer-operated laundering apparatus~~ washing machine; applying mechanical energy to provide relative movement within said fabric in the automatic ~~consumer-operated laundering apparatus~~ washing machine; separating said working fluid

094342.0028
Examiner Gregory E. Webb
Art Unit 1751

from the fabric; cooling the working fluid for decreasing the dissolved soils in the working fluid; and filtering said working fluid to produce a permeate.

20. (Original) The method of claim 19 wherein said non-reactive, non-aqueous, non-oleophilic, apolar working fluid under standard conditions is further characterized by: a KB value less than approximately 30; a surface tension less than approximately 35 dynes/cm²; and a solubility in water less than 10%.
21. (Previously Amended) The method of claim 19 including a further step of filtering the permeate through a hydrophobic filter.
22. (Previously Amended) The method of claim 21 including a further step of filtering the permeate through a ceramic filter.
23. (Original) The method of claim 19 wherein vapors from said working fluid are treated by a high speed spinning disc which removes said working fluid and water vapor from the air stream.
24. (Original) The method of claim 23 including the step of cooling the vapor contacted by the spinning disc.
25. (Original) The method of claim 19 wherein said working fluid may have impurities of not more than approximately 20%.

094342.0028
Examiner Gregory E. Webb
Art Unit 1751

26. (Original) The method of claim 19 wherein the washing adjuvant is selected from a group consisting of: builders, surfactants, enzymes, bleach activators, bleach catalysts, bleach boosters, bleaches, alkalinity sources, antibacterial agents, colorants, perfumes, pro-perfumes, finishing aids, lime soap dispersants, composition malodor control agents, odor neutralizers, polymeric dye transfer inhibiting agents, crystal growth inhibitors, photobleaches, heavy metal ion sequestrants, anti-tarnishing agents, anti-microbial agents, anti-oxidants, linkers, anti-redeposition agents, electrolytes, pH modifiers, thickeners, abrasives, divalent or trivalent ions, metal ion salts, enzyme stabilizers, corrosion inhibitors, diamines or polyamines or alkoxylates, suds stabilizing polymers, solvents, process aids, fabric softening agents, optical brighteners, hydrotropes, water, suds or foam suppressors, suds or foam boosters, fabric softeners, antistatic agents, dye fixatives, dye abrasion inhibitors, anti-crocking agents, wrinkle reduction agents, wrinkle resistance agents, soil release polymers, soil repellency agents, sunscreen agents, anti-fade agents and mixtures thereof.

27. (Original) The method of claim 26 wherein a preferred surfactant for the system will have a hydrophilic-lipophilic balance from approximately 3 to 14.